Parergon

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My first duty must be to welcome to this hospital the new generation of students. Each year brings to its wards a stream of new life. Those who have gone before you have built up the traditions of the century which you now inherit, but those of you here to-day have the peculiar privilege of not only maintainng the traditions of the past, but also of initiating those of the new century. It is for you to carry on the task, sustained by the vision of medicine as it is yet to be. Yet, if it was the youth Samuel who had the vision, it was the old man, Eli, who was able to interpret it, and it is in this combination of youth and age, of vision and experience, that we together, teachers and taught, but always fellow students, enter upon this first year of a new century in the life of the University.

Yet we regret that this fellowship of teacher and student should this year have suffered grievous loss and its erstwhile perfection be marred by the deaths of Sir Thomas Houston and of Dr. Foster Coates.

For over half a century Sir Thomas was associated with our hospital and teaching school. He gave his life to medicine, resolved to—

> "Cease not, till day streams to the west, then down
> That estuary, drop down to peace."

You have lost the benefit of his inspiration : we of the staff a friend.

To his teaching and practice Dr. Coates brought great gifts of keen observation and commonsense. Every student who passed through his unit was rendered thereby a better practitioner of medicine. Osler's text-book was as a Bible to him and no one taught better the difficulties of medicine in general practice.

The medical profession attracts to itself a great variety of men and women stimulated by the most diverse of motives. Somehow in their years of training they obtain the stamp of Queensmen and Queenswomen and go forth from us capable in the art of medicine and imbued with love of their profession. This is an age of plannng, and though I believe that each of us should remain sufficiently elastic to meet any set of circumstances, yet it is a good thing to pause at the entry to your careers and endeavour to appreciate the aims and objects which each one should have in view. For Osler a knowledge of disease and its cure was not enough. Knowledge of self was equally, if not more, important. Knowledge of disease and its cure you will learn from your teachers and from your experience in the out-patient departments and the wards. Knowledge of self is more difficult

to obtain. The field of medicine is so vast, the variety of disease and its symptoms so manifold, and the human problems you will encounter so varied that there is no branch of learning which may not be of help. Mere technical proficiency is not enough. There are those who believe that, as science develops, medicine will become more and more a technology and that eventually a purely technical presentation and training will be sufficient. The graduates of the past century bear witness against this fallacy, and we can but hope that the graduates of the new century will continue not only to apply what is best in our art, but will also continue to show that consideration for the weak, pity for the suffering, and charity to all which has ennobled the profession. Much of what you need forms no official part of your course and you must seek it for yourselves. A study of science will increase your powers of discernment; of literature, music, or art, your powers of appreciation and finer feeling. The wider your education, the greater the knowledge of self, the more easily will you make contact with the sentient entity that is your patient, and the better a practitioner you will be.

There is in Egyptian mythology the story that the body of the virgin Truth was cut into a thousand parts and scattered. "From that time ever since," writes Milton, "the sad friends of Truth, such as durst appear, imitating the careful search that Isis made for the mangled body of Osiris, went up and down gathering up limb by limb still as they could find them." We have not found them all yet, and many of them lie in other fields of culture than those of medicine.

The story of medicine is illumined not only by numerous practitioners who studied outside the bare skeleton of medical facts, but who oftimes became contributors to other and broader fields of culture. So I have chosen for the title of this address—"PARERGON"—or work that is done over and above the daily round.

In all the learned professions there are men who have turned to some other vocation. It has been claimed for medicine—by one of ourselves—that it stands foremost among the professions in the number of its practitioners who have become distinguished in the arts. There is reason why it should be so, for Æsculapius, the god of the healing art, was in Greek mythology fathered by Apollo, the god of culture, and, though we may be disciples of Æsculapius, we are also the votaries of Apollo. Some, though bidden to follow Apollo, continue to practice their profession. Others become truants to medicine. In his Linacre lecture Lord Moynihan gave almost one hundred names of such truants. Dana collected poetical works written by medical men, and produced a collection of 157 names and over 295 works. More recently McDonough has produced a volume containing 411 names of medical poets. Prose writers abound. Amongst moderns there are James Bridie, A. J. Cronin, Warwick Deeping, Somerset Maugham, Francis Brett Young, and de Vere Stacpoole. Others have wandered into adjacent fields of science, of theology, or of statesmanship.

Amongst this wealth of truants Northern Ireland has not been unknown. Exactly one hundred years ago, in 1849, when the gates of Queen's College were about to open, there died in Lisburn, Dr. Thomas Hancock. Born of Quaker parents

in the south of County Antrim in 1783, he was apprenticed to a surgeon in Waterford. Like so many of his contemporaries, he took his systematic course in Edinburgh, and graduated there in 1809. He was particularly interested in epidemic disease, publishing a thesis on "De Morbis Epidemicis" and a book of Researches into the Laws and Phenomena of Pestilence, including a medical sketch and review of the Plague of London in 1821. This book was well received, being regarded as the best on the subject. Writing before the discovery of bacteria, he considered that "condensed human effluvia, the product of local filth, and crowded ill-ventilated houses, are connected with the origin of all epidemic plagues, and their dissemination has been generally in proportion to the extent of these local causes," and counselled "calmness and regularity : patience under difficulties, careful ablution : a full and rather generous system of diet, under the guidance of temperance in everything," believing that these would prove "better prophylactics and antidotes to the disease, than can be supplied by all the well-stored magazines of health and boasted implements of our art." It is of some local interest that he describes the experience of a Belfast physician in 1809, who informed him that in the course of four months there were between two and three hundred persons admitted to the Belfast Fever Hospital and that "they were frequently so crowded in the wards, as nearly to cover the floor with their beds : in which case, although the building is new, airy, and well regulated, the matron, twenty-two nurses, and the apothecary took the disease." "With regard to most of these things," he concludes, "our science appears to be in its infancy," but "where there is a strong predisposition, it is natural to conclude that morbid effluvia from the diseased to the sound must assist in propagating the mischief, by acting as a powerful exciting cause." There is occasionally almost a prophetic touch, as when he writes : "The path of Discovery is without doubt still open in various directions, to reward the cautious and perhaps the bold adventurer. Accident may indeed discover at some happy moment what has eluded the most learned and diligent research. But the observation must on the whole be deemed correct, that medicine has not hitherto received any notable improvement by speculation, nor is it likely to be advanced as a science but by the slow but very humble progress of experience." Or again he anticipates Professor Cuming, famous in the old Frederick Street Hospital, "the high priest of philosophic doubt," as the late Sir Robert Johnstone called him. "Therefore," writes Dr. Hancock, "however splendid the talents, and excellent the qualifications of a physician may be, there is in my opinion no profession which demands a greater share of what may be termed philosophical diffidence than that of medicine."

Thomas Hancock practised in London and was elected physician to the City and Finsbury Dispensary. There are a number of articles by him in the Belfast Monthly Magazine in 1810 dealing with Lunatic Asylums. In 1832 he moved to Liverpool and in 1838 returned to Lisburn, where he spent the last thirteen years of his life. His Quaker beliefs influenced his literary production. He published an "Essay on Instinct," "An Elegy supposed to be written on the Field of Battle," "The Law of Mercy," a poetical essay on the punishment of death, and in 1825

his most valuable work "Principles of Peace exemplified in the conduct of the Society of Friends in Ireland during the Rebellion of 1798." As the Society of Friends played no part in this rebellion and took no side, this volume represents the most impartial of the descriptions of that turbulent period.

In 1947 there retired to Portglenone Dr. Richard Hunter, Secretary of Queen's University, sometime lecturer in Anatomy, Artist, Medical Author, and Circus Impresario. In 1756 there was born in Portglenone one William Babington, who, following an apprenticeship to a physician in Derry, completed his medical studies at Guy's Hospital and became assistant surgeon to the Haslar Naval Hospital. There he served four years, when he obtained the position of apothecary to Guy's and lectured on chemistry. He obtained the degree of M.D. from Aberdeen in 1795, and returning to London was elected physician to Guy's Hospital. By special grace he was elected F.R.C.P. in 1827, and in 1831 an Honorary M.D. of Dublin University. Though he was a successful physician, his interest lay in mineralogy. "If in the course of his life," writes Dr. Munk, "he made no conspicuous addition to the science of medicine it was that his energies were devoted to the sciences of chemistry and mineralogy." He was, according to the evidence available, the founder of the Geological Society and certainly was its president in 1822. He contributed little original research, though he catalogued the rich collection of minerals belonging to the Earl of Bute, but did much to encourage scientific endeavour in others. He was elected an F.R.S. and took part in the foundation of the Hunterian Society. His son also became physician to Guy's, whilst his daughter became the wife of Richard Bright, whose name is perpetuated in diseases of the kidney.

A contemporary of Babington's was Thomas MacLear of Newtownstewart. He was, like many of us, intended for the Church, but refused to continue his studies. Born in 1794, he was sent to England in 1808 to be educated for the medical profession. He also studied at Guy's Hospital and was successful in obtaining his F.R.C.S. Appointed house-surgeon at the Bedford Infirmary, he became acquainted with Admiral Smyth, who infected him with a love of astronomy. Though continuing to practise medicine in partnership with his uncle, he evidently maintained his interest in astronomy and acquired some reputation in the subject for the accuracy and wealth of his observations. Indeed, at one period the Astronomical Society lent him the Wollaston Telescope and set it up in his garden. The quality of his work must have been impressive, for in 1833 he was appointed Astronomer Royal at the Cape of Good Hope. Here he continued his studies and compiled a vast amount of observation. He became an intimate friend of Livingstone, and may be said to have contributed to the latter's journeys of exploration in Africa, for it was MacLear who instructed the explorer in the use of the sextant. He was knighted in 1860 and died in 1879.

To those of you who know the history of this Medical School and the part played by the Royal Belfast Academical Institution, there will be an interest in James Sheridan Knowles. Born in Cork, he quarrelled with his mother, ran away from home, and joined the militia. Next we hear of him in Aberdeen, where he

graduated M.D. For a short time he pursued the practice of medicine and was attached to the Jennerian Institute as vaccinator. At the foundation of 'Inst' he was offered the headmastership of the English Department, but declined in favour of his father, to whom he became assistant. His heart was not in medicine, and he was attracted by the stage. Play-writing was his real love, and possibly his appointment as Teacher of Elocution at Inst was an expression of this same interest. His play "Caius Gracchus" was produced in the Theatre Royal—now the Royal Cinema in Arthur Square—in 1815, but he sought wider fields to conquer and in 1817 he left Belfast for London. There he produced a number of plays and was described by Hazlitt as "the first tragic writer of his time." For his contributions to the stage he was granted a civil list pension of £200. He died in 1862.

Better known, however, than any of these is Sir Hans Sloane. Born in 1660 in Killyleagh, he studied medicine in London, graduated at the University of Orange and eventually rose to be not only a celebrated physician, the friend of royalty, but also President of the Royal College of Physicians and President of the Royal Society. Infected early in life with a love of natural history, he acquired an enormous collection "fifty volumes in folio scarce sufficing to contain the catalogue of this immense museum consisting of above 200,000 articles." By his will, his executors offered the collection to the King for £20,000, and so, as Professor W. W. D. Thomson put it in his Presidential Address at the Ulster Medical Society in 1937, "The vision of a young Ulsterman and the dreams of his old age gave England the British Museum."

Astronomer, author, collector, geologist, and playwright constitute a sufficiently varied output from the medical graduates of such a small area, but amongst the greatest must be numbered two doctors of local origin who became outstanding chemists.

Business interests took John Black, a native of Belfast, to Bordeaux, whence he contributed to the education of the palate of his contemporaries. There, in 1728, a son, Joseph, destined to become one of the most eminent men of his generation, was born. At the age of 12 years he was returned from France to the sterner climate of Belfast. Here he embarked upon his education. After six years of schooling at a private grammar school he was sent to Glasgow University, and four years later to Edinburgh. In both he pursued the study of medicine, though a paper which he presented to the Medical Society of Edinburgh in 1756, whilst still an undergraduate, may be said to have laid the foundation of quantitative analysis. He demonstrated the fact that many substances were a combination of various elements with "fixed air." In 1756, at the age of 28, he was offered and accepted the Chair of Anatomy and Chemistry in Glasgow, but soon transferred to the Chair of Medicine, which he occupied for ten years. Simultaneously he conducted a large practice and embarked upon scientific experiments of fundamental importance. During this period he discovered "Latent Heat." In 1766 he was appointed Professor of Medicine and Chemistry in Edinburgh, whilst his merit as a practitioner of his art was recognised by his appointment as First Physician to His Majesty for Scotland. He was a gifted lecturer, expounding complicated

problems with great clarity, so that his lectures became extremely popular and were attended not only by serious students, but also by the fashionable intellectuals of his day. It is difficult to realise that he was prevented by indifferent health from attaining to his full powers, for he accomplished more than most men. He was acknowledged as the greatest chemist of his day, and Lavoisier was proud to call himself a disciple. He died in 1799.

The other, Thomas Andrews, pursued a more local career. Born in Donegall Square, Belfast, in 1813, he was educated at the recently opened Royal Belfast Academical Institution, and subsequently studied at Glasgow, Paris, and Dublin, graduating M.D. in Edinburgh in 1835, the very year in which the Medical Faculty of the Belfast Medical School was instituted. His first appointment was as Professor of Chemistry in the newly founded Faculty, but, like Black, he also opened a private practice in the neighbourhood. Ten years after his acceptance of the chair in 'Inst' the new Queen's College was granted its Charter, and Andrews appointed its first and only Vice-President. When in 1849 the new college was opened he became its first Professor of Chemistry and served his new allegiance until his retirement thirty years later. He was successful in combining teaching, research, and administrative work, gaining wide renown for his discoveries relative to the critical temperature of gases, and the continuity of the gaseous and liquid states of matter. A Fellowship of the Royal Society and Honorary Degrees in the Universities of Edinburgh, Glasgow, and Dublin show that his reputation, which still persists amongst us, was more than merely local. Unlike Black, he became a truant to medicine, and from the time of his appointment to Queen's College he devoted himself entirely to chemistry. It is said that some of his most crucial experiments were performed beneath the laburnum tree which still somewhat precariously persists in the quadrangle of the University, and which in these modern days appears to offer shelter more often to adventures of the heart, than to those of scientific discovery.

Yet, whilst these are outstanding examples of medical graduates who have made their name in the subjects outside medicine to which they were attracted, there is a multitude of men who have continued in their profession and continued to utilise the knowledge gained from hours of truancy in other fields to further their proficiency as interpreters of humanity and healers of human suffering. Even if we confine ourselves to roughly the same period as produced the few I have already mentioned, we find men like Dr. James McDonnell, the founder of this hospital and medical school; Dr. Henry MacCormac, the first Professor of Medicine; Dr. Robert McGhee, Dr. S. M. Stephenson, Dr. S. S. Thompson, and Dr. William Drennan, all continuing to practice their profession, but endowing their fellow townsmen with the benefit of their culture, and leaving behind a record not only of the good medical life, but also of the good life.

It would be wrong if I were to give the impression that Olympus reared its head in these early days of the nineteenth century only in our own island or in this favoured province. I merely thought it but right that, on the threshold of a new century of endeavour, we should for a few minutes pause in the rush of work

to "call to remembrance what acts our fathers did in their time," and to join hands with the men of our own stock who were active in the days of our foundation; whose traditions we inherit; and whose lives continue to be an inspiration to us. These men were not of our medical school, because there was in their day no such institution. If there had been, there is little doubt that, as well as being fellow medical practitioners, fellow Ulstermen, we might have also hailed them as fellow Queensmen.

However, outside in the greater world similar men lived and died, contributing to their profession, or, truants to medicine, enriching life in other ways. Even to mention them would produce a lengthy catalogue of scientists, litterateurs, architects, and artists, with an occasional rara avis like Dover of the powder, author of a text-book of medicine, privateer and discoverer of Alexander Selkirk, the prototype of Robinson Crusoe, or Oliver of Bath, whose contribution to humanity was a bun.

In such a catalogue an honoured place would be found for a whimsical personality whose sayings and writings were familiar to the older generation—Oliver Wendell Holmes. In fact I am not sure that he is read at all by the younger generation, and yet his life presents such a combination of solid accomplishment in his profession, compounded with a clever wit, an intense humanism in literature, with a drop of the pixie in his poetry, that he must remain a rather unique member of our profession. Last, but not least, for my purpose this morning, his life spans the years of the inception, the creation, and the stabilising of our own medical school.

Born at Cambridge, Mass., in 1809 in the Old "Gambrel-roofed House," he was a son of the manse. Brought up in an atmosphere of Calvinism, he was intended for the Church. "I might have been a minister myself," he was to write in later years, "if a certain clergyman had not looked and talked so like an undertaker." His undergraduate studies were at Harvard College with the class of 1829, which he made famous by a series of occasional poems written for their annual reunions. He seems to have lived much the same life as undergraduates in general. Wine was not unknown to him. Parties in his rooms were as undergraduate as such parties usually are. His letters abound in references to charming young women. "I do believe I shall never be contented," he writes, "until I get the undisputed mastery of a petticoat." That was in 1830. In 1831 he is still thinking of "the pretty little hand which I held so quietly but a very little while ago—and the girl who was silly enough to let me." These statements remind one of Osler's: "What is a student but a lover courting a fickle mistress who ever eludes his grasp." In Osler's case, however, the "fickle mistress" happened to be the great abstraction "Truth." Holmes, nevertheless, had sense enough to postpone his undisputed mastery for ten years, and it was not until 1840 that the pretty little hand of Amelia Lee Jackson finally refused to be squeezed and cast aside. After receiving his Bachelor's degree he embarked upon a study of the law, but found it unattractive. "I know not what the temple of law may be to those who have entered it, but to me it seems very cold and cheerless about the threshold." One year in the law school was sufficient, and in the ensuing

session we find him enrolled as a medical student. He was now twenty-one, and his entry into medicine was accompanied by his entry into literature. Reading that the frigate "Constitution"—the Victory of America—was to be destroyed, he dashed off a poem with a pencil—"Old Ironsides." The poem stirred the patriotism of the young nation and Old "Constitution" was saved. Following two years as a medical student in a private school in Boston, he embarked for France, where, for the next two years he studied in Paris. Here he came in contact with Louis, one of the greatest physicians of the age; with Baron Larrey, who had been the favourite surgeon in the armies of Napoleon; with Ricord, the gynæcologist; and with Lisfranc, another of the surgeons of Napoleon. Paris, indeed, was at this time the medical centre of the world. Louis was one of the first great teachers of the correlation of symptoms with pathological findings, and his researches into typhoid and phthisis made important advances. His writings and teachings possessed great influence, particularly in America, and Holmes was following in the footsteps of Gerhardt and many other American physicians when he sat at his feet.

His letters home reveal some interesting opinions of his teachers. "The vivacious Ricord, whom I remember calling the "Voltaire of pelvic literature"—a sceptic as to the morality of the race in general, who would have submitted Diana to treatment with his mineral specifics and ordered a course of blue pills for the vestal virgins"; Lisfranc, "who regretted the splendid guardsmen of the Old Empire, because they had such magnificent thighs to amputate." The general surgeon may have become somewhat more of a physiologist with the passing of the years, but the psychology of gynæcologists appears set fast in their tradition! For Louis there is nothing but praise. He taught "no doctrine but nature and her laws, pointed out at the bedside for those to own who see them, and for the meanest student to doubt, to dispute, if they cannot be seen: he has examined the dead body oftener and more thoroughly in the course of a year than the vast majority of our practitioners have in any ten years of their lives." Yet, studying in Paris was expensive and he was keen that his studies should not be curtailed. "What better can be done with money," he writes to his parents, "than putting the means of instruction—the certain powers of superiority, if not of success—into the hands of one's children . . . A boy is worth his manure as much as a potato patch." His arguments were relatively successful and he stayed two years. "He took his work and he took his pleasure, but he took his work with all his might, and his pleasure very moderately." In fact he was a very satisfactory undergraduate. The time was not wasted and he enunciated three principles which he had learnt in Paris which are as sound to-day as they were in 1834. "Not to take authority when I can have facts; not to guess when I can know; not to think a man must take physic because he is sick."

In December, 1835, as the first medical lectures were being given in our own school, he sailed from Havre to continue his studies in Boston. In 1836 he obtained his degree of M.D. for a thesis on "Acute Pericarditis" and began the practice of medicine. According to Morse, his biographer, his chief pleasure in taking up the

practice of medicine was that it obliged him to keep a horse and chaise. In this awkward vehicle he loved to dash through the streets at a speed involving peril both to himself and to others. His practice did not grow rapidly. Indeed, at one period, he threatened to hang out a sign, "The smallest fevers thankfully received." After all, in the same year his first book of poems had been published, and the Puritans of New England were probably not attracted to the young practitioner whose pen abounded in such witticisms—"a man that wrongs his manliness by laughing like a boy." The award of the Boylston Prize in 1836 and 1837 for essays on "Neuralgia" and "Direct Exploration in Medical Practice," and "Malaria" may have served to rehabilitate him in their eyes. For these essays he was forced to read much in the literature of medicine, and the knowledge thus gained is seen reflected in the pages of his subsequent writings, where he seems at home with the writings of the fathers of his profession. He was, however, too sympathetic to practice medicine and soon forsook the art for the science. In 1838 he helped to establish a private school of medicine in Boston—the Tremont Street Medical School, and in 1839 and 1840 acted as Professor of Anatomy at Dartmouth College. During the next few years he contributed several medical papers—the first an eloquent attack on Homœopathy, the second on "The Contagiousness of Puerperal Fever (1843)" The second of these two papers was read before the Boston Society for Medical Improvement. It was not the result of individual research, but rather a review of recorded cases assembled from many sources and analytically and logically considered. It must be remembered that this was before the days of Pasteur and our modern ideas about bacteria. Many years later he was to write, "I am pleased to remember that I took my ground on the existing evidence before the little army of microbes was marched up to support my position." No previous article had presented the evidence for contagion so convincingly, and, as his conclusions were presented with some feeling, his oponents naturally attacked them. Two of the most distinguished professors of obstetrics were foremost in this attack. Writing of the students of these professors we have Holmes at his best : "They naturally have faith in their instructors, turning to them for truth, and taking what they may choose to give them : babes in knowledge, not yet able to tell the breast from the bottle, pumping away for the milk of truth at all that offers, were it nothing better than a professor's shrivelled fore-finger." Is it any wonder that Holmes' viewpoint prevailed?

In 1847 he was appointed Parkman Professor of Anatomy and Physiology in Harvard University. He possessed great gifts as a lecturer and his colleagues soon apportioned to him the one o'clock lecture which followed upon four other lectures. It took a lecturer of more than ordinary attraction to hold the attention of jaded students, but it was no ordinary lecturer who compared a sweat-gland to a fairy's intestine or described the lower portions of the pelvis as "the tuberosities of the ischia, on which man was designed to sit and survey the works of creation." He believed and practised that the only way of teaching a whole class was by enormous repetition, representation, and illustration in all possible forms.

He was Dean of the Medical School from 1847 to 1853. He was one of the early

medical microscopists. As a professor he had a kindly reputation, and the story is told that when a student presented himself for his examination the Professor asked him to describe the nervus petrosus superficialis minor. When the student was able to do so quite accurately the Professor exclaimed: "If you know that, you know everything! Now tell me about your dear old father."

Two years after he joined the Harvard School Professor Parkman was murdered by Professor Webster, the Professor of Chemistry. Whilst investigations were on foot every teacher of the school, including Holmes, was suspect, but his wife was able to provide an alibi.

In his first decade at the school ether was first used as an anæsthetic, and the following letter from Holmes to Morton, the dentist who demonstrated its use, serves to show what part Holmes had in it.

"My dear Sir,

Everybody wants to have a hand in a great discovery. All I will do is to give you a hint or two as to names—or the name—to be applied to the state produced, and the agent.

The state should, I think, be called "Anæsthesia." This signifies insensibility more particularly to objects of touch.

The adjective will be anæsthetic. Thus we might say the state of anæsthesia or the anæsthetic state. The means employed would be properly called the anti-æsthetic agent. Perhaps it might be allowable to say anæsthetic agent, but this admits of question.

The words anti-neuric, aneuric, neuroleptic, neuro-lepsia, neuro-stasis, etc., seem too anatomical; whereas the change is a physiological one. I throw them out for consideration."

In 1871 a separate chair of Physiology was created, and thereafter until 1882, he devoted himself entirely to anatomy.

Yet, though Holmes was a competent professor, a brilliant and witty lecturer, he made little advance in medicine. His paper on the "Contagiousness of Puerperal Fever" stands as his main contribution, and it is rather as "the most successful combination the world has ever seen of the physician and the man of letters," that his name survives.

In the early days of his medical life it was chiefly as a poet that he became known, and, in the main, as a poet of the occasional verse for the dinner party or the annual reunion. Though showing a clever ability, few of his poems are great verse. He himself preferred the "Chambered Nautilus" ending :—

"Build thee more stately mansions, O my soul,
As the swift seasons roll
Leave thy low-vaulted past
Let each new temple, nobler than the last,
Shut thee from heaven, with a dome more vast,
Till thou at length are free,
Leaving thine out-grown shell by life's unresting sea."

Yet there is something peculiarly appropriate to himself in "The Last Leaf":—

"And if I should live to be
The last leaf upon the tree
In the spring,
Let them smile as I do now
At the old forsaken bough
Where I cling."

for he was to live to see all his friends—Emerson, Hawthorne, Whittier, Agassiz, Longfellow—depart. Most of his poems are in a lighter vein and of them the Deacon's Masterpiece or "The Wonderful One-Hoss Shay" takes pride of place.

In 1857 the Atlantic Monthly was founded, and he began the publication of the three books of the Breakfast Series—The Autocrat, the Professor, and the Poet—upon which his fame as an author largely depends. Those of you who find delectation in the whimsicalities of Charles Lamb will here find the same tender sensitiveness embellished by a smile for the foibles and a tear for the sorrows of their fellow creatures! Often has he been called the American Goldsmith, and it is to the race of the ever young that Goldsmith, Lamb, and Holmes belong. These books you must read for yourselves. Perusal of the Autocrat in particular will give you an insight into what Holmes really was like, and many of his better poems are scattered through its pages. All of them shed light on his ability and character, for they are full of self revelation. One quotation from "Soundings from the Atlantic" (1864), will let you see him through the spectacles of his landlady.

> "This gentleman warn't no great of a gentleman to look at. Being of a very moderate dimension—five foot five he said, but five foot four more likely, and I've heard him say he didn't weigh much over a hundred and twenty pound. He was light complected rather than darksome, and was one of them smooth faced people that kept their baird and whiskers cut close, just as if they'd be very troublesome if they let them grow—instead of laying out their face in grass, as my poor husband that's dead and gone used to say. He was a well behaved gentleman at table, only talked a great deal, and pretty loud sometimes, and had a way of turning up his nose when he didn't like what folks said."

It has been said, indeed, that Holmes was his own Boswell. He was a most charming talker, and there are those who would have it that his conversation was the best part of him. Charles Kingsley once called him "an inspired jackdaw." In many ways he is a suitable subject for to-day's address, for he was a warm believer in youth and in the future which they were to build. To a graduating class of medical students he once said: "Revolutions are not made by men in spectacles and the first whisper of a new truth is not caught by those who begin to feel the need of an ear-trumpet." His writings are very definitely influenced by his medical knowledge. "He is alone," writes Chesterton, "in combining those verbally similar but profoundly diverse things, a knowledge of the cosmos, with a knowledge of the world." He died in 1892.

There are some who believe that medicine is an all-consuming profession; that its study is more than enough to engage the full time of its serious students; and

that those who seek "the verdant ways and winding mossy paths" of other cultures are thereby rendered dilettantes in their chosen profession. From a purely scientific viewpoint this may be quite true, for the search for truth is limitless and "He that loveth father or mother or son or daughter more than Me is not worthy of Me." Yet mere knowledge of medical science is not in itself enough to ensure the development of the good practitioner of the medical art, and without knowing much of science you may have the knowledge of life, which makes anything you do of value to the community. A little truancy into that adjacent field of culture will bring reward in the assurance that there is a quality as well as a quantity of life.

Holmes advised his students to look again at the aphorisms of Hippocrates. The merit of the Father of Medicine was to begin with the patient rather than the disease—to see him in his environment, to understand how the internal environment of the body was influenced by climate, by water, by soil, and by all those things that constitute the external environment. In the Laws, Plato regarded physicians as educators—physicians who were wise in collaborating with Nature, helping the patient to play his own part in this collaboration. For this the physician required that "education in virtue from youth upwards, which enables a man to pursue the ideal perfection." Such knowledge is not readily attained by even the broadest study, and certainly not within the necessarily confined limits of a curriculum. Many kinds of knowledge have the role in life that vitamins have in the diet, and nothing that throws light on life is alien to the study of medicine. As Goethe has it, "who brings much will surely bring someone something."

Robert Bridges, one who became a complete truant from medicine, was convinced that he could be a better poet if he became a doctor and so came directly into contact with human life. At the age of 85 he published his "Testament of Beauty," which has been described as the "first great didactic poem of æsthetic philosophy" worthy to rank beside the De rerum naturæ of Lucretius. There you will find much of what I have tried to say :—

> "Science, they will say,
> knoweth naught of this beauty. But what kenneth she
> of colour or sound? Nothing : tho' science measure true
> every wave-length of ether or air that reacheth sense,
> there the hunt checketh, and her keen hounds are at fault;
> for when the waves have pass'd the gates of ear and eye
> all scent is lost : suddenly escaped the visibles are
> changed to invisible : the fine measured motion to
> immeasurable motion."

You, who are entering the wards of this hospital, are also embarking upon a life very different from that of your teachers. From much that was hallowed for them by beauty, custom, and tradition the glory has departed. There is abroad an abdication of personal responsibility. "Individual worth," once "the high goal of our great endeavour," is mersed in the communal good. The commonsense of biological law crumbles before an ideology. Though the traditions of medicine remain, its practice has changed, and the hospital erected for the succour of the suffering poor now opens its doors to all. The youth embarking upon this turbulent

sea must possess a balanced personality. There have been as difficult problems before, and men have arisen to overcome them and to guide the evolution of the art of healing. Medicine is a speciality, but the youth who to-day is called upon to practice it must be a whole man. Education, discipline, daily routine must each tend towards the development of this wholeness. A hundred years ago a medical poet was writing :—

God give us men ! A time like this demands
Strong minds, great hearts, true faith and ready hands;
Men whom the lust of office does not kill :
Men whom the spoils of office cannot buy :
Men who possess opinions and a will :
Men who have honour—men who will not lie :
Men who can stand before a demagogue,
And damn his treacherous flatteries without winking !
Tall men, sun crowned, who live above the fog
In public duty, and in private thinking.

And so we come back to the idea that wholeness is necessary, and for this wholeness knowledge of self is essential. As such, it was appreciated by Osler. "Know thyself," says the Bible. "Know thyself" runs through the whole gamut of Greek culture, when the balance of life was most nearly achieved. Thales uttered it; Hippocrates formulated it; the Delphic Oracle inscribed it over the gates of the Temple; Socrates taught it. Knowledge of self can only come to the medical student through "parergon," but with such knowledge the traditions of our profession, the traditions of our school, the welfare of our fellow men are in safe keeping.

"The skill of the physician shall lift up his head :
And in the sight of great men he shall be in admiration."

And so we welcome those of you, who are strong enough to come, to a great struggle and hand over to you the keeping of our medical faith. In so doing we hope that you will go forth eventually from these wards into the years of the new century in the attitude of the pilgrims :—

We are the Pilgrims, Master, we shall go
Always a little farther.

(I am indebted to Miss Jean Webster of the University Library for her help with the literature.)

REVIEW

AIDS TO SURGICAL NURSING. By K. F. Armstrong 5s.

THE early editions of this book were appreciated by nurses, but this new edition has enhanced its value.

Any student nurse, who uses it as her text-book and assimilates its contents, will have no difficulty in passing her State Examination.

All the chapters dealing with the newer treatments, e.g., plastic surgery, thoracic surgery, penicillin, tidal drainage, are informative as well as interesting reading.